What is claimed is:

1. A zinc can for battery anode, said can has covered bottom and cylindrical shape and made from an active material for battery anode which material composition is from 98.7 percent by mass to 99.8 percent by mass of zinc, 0.01 percent by mass or more and 0.7 percent by mass or less of bismuth, 1ppm or less of antimony, 70ppm or less of lead, and 20ppm or less of cadmium, which material metal structure in a cross section of said can wall being cut in the direction of height and thickness consists of crystal which average grain diameter is 8 μm or more and 25 μm or less as measured on a projected image of said crystals on a horizontal line in a thick direction of the can which average grain diameter is computed out.

2. The zinc can for battery anode according to claim 1, wherein the active material contains from 0.0003 to 0.003 percent by mass of magnesium in addition.

3. A zinc can for battery anode according to claim 1 or claim 2, wherein the crystals of material structure constitute a ratio (O/I ratio) of from 1.0 to 1.4, (O) representing an average grain diameter of the crystals existing vertically epitaxial to the height direction on a cross section being cut in the height and the thickness direction in a range of 200 μm from the outer surface of the can wall and (I) being the average grain diameter of the

crystals existing in a cross section within 200μm from the inner surface, being said diameters measured on a projected image of the crystals on a horizontal line in the thickness direction, which average value for O and I being computed out.

4. A manganese dry battery with an anode zinc can with covered bottom and cylindrical shape made from an anode active material which material composition is 98.7 percent by mass or more and 99.8 percent by mass or less of zinc, 0.01 percent by mass or more and 0.7 percent by mass or less of bismuth, 1ppm or less of antimony,70ppm or less of lead, 20ppm or less of cadmium which material metal structure in a cross section of said can wall being cut in a height and thickness direction consists of crystals of 8 μm or more and 25 μm or less of average grain diameter as measured on a projected image of the crystals on a horizontal line in the thickness direction.

5. A manganese dry battery consisting with natural manganese dioxide as cathode active material and zinc alloy as anode active material comprising:

an anode can with covered bottom and cylindrical shape made from alloy for anode active material which alloy composition is 98.7 percent by mass or more and 99.8 percent by mass or less of zinc, 0.1 percent by mass or more and 0.7 percent by mass or less of bismuth, 1ppm or less of antimony, 70ppm or less of lead, 20ppm or less of cadmium which alloy metal structure in a cross section

of said anode can wall being cut in a height and a thickness direction consists of crystals of 8 μm or more and 25 μm or less of average grain diameter as measured on a projected image of the crystals on a horizontal line in the thickness direction.

6. A manganese dry battery consisting with electrolytic manganese dioxide as cathode active material and zinc alloy as anode active material comprising:

an anode can with covered bottom and cylindrical shape and made from alloy for anode active material which alloy composition is 98.7 percent by mass or more and 99.8 percent by mass or less of zinc, 0.01 percent by mass or more and 0.7 percent by mass or less of bismuth, 1ppm or less of antimony, 70ppm or less of lead, 20ppm or less of cadmium which alloy metal structure in a cross section of said anode can wall being cut in a height and a thickness direction consists of crystals of 8 μm or more and 25 μm or less of average grain diameter as measured on a projected image of the crystals on a horizontal line in the thickness direction.

7. The manganese dry battery according to claim 5 or claim 6, wherein the anode active material contains from 0.0003 percent by mass to 0.003 percent by mass of magnesium in addition.